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National Aeronautics and
Space Administration

TechBriefs



Electronic Components and Circuits



Electronic Systems



Physical Sciences



Materials



Computer Programs



Mechanics



Machinery



Fabrication Technology



Mathematics and Information Sciences



Life Sciences

99-07

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NO

INTRODUCTION

Tech Briefs are short announcements of innovations originating from research and development activities of the National Aeronautics and Space Administration. They emphasize information considered likely to be transferable across industrial, regional, or disciplinary lines and are issued to encourage commercial application.

Availability of NASA Tech Briefs and TSPs

Requests for individual Tech Briefs or for Technical Support Packages (TSPs) announced herein should be addressed to

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Please reference the control numbers appearing at the end of each Tech Brief. Information on NASA's Commercial Technology Team, its documents, and services is also available at the same facility or on the World Wide Web at www.nctn.hq.nasa.gov.

Commercial Technology Offices and Patent Counsels are located at NASA field centers to provide technology-transfer access to industrial users. Inquiries can be made by contacting NASA field centers and program offices listed below.

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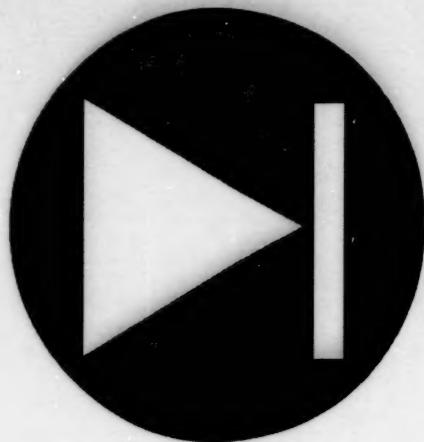
41 Mathematics and Information Sciences



45 Life Sciences



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Electronic Components and Circuits

Hardware, Techniques, and Processes

- 7 Series-Connected Boost Regulators
- 8 Improved Q-Switch Drivers
- 9 Improved Successive-Approximation ADCs With Charge Balancing
- 10 Seven-Element Circularly Polarized Patch Antenna
- 11 MMIC Converters for K- and Ka-Band Communications